

### **Remarks**

As detailed in the accompanying Petition to Revive and Request for Continued Examination (RCE), the present application went abandoned on April 16, 2007 after failure to respond to the first substantive Office Action mailed August 8, 2006. This Response and the accompanying RCE are being submitted to provide a complete reply to the outstanding Office Action. MPEP 711.02.

The Office Action rejected claims 1-42 and withdrew claims 43-51 from further consideration. The Applicant has hereinabove presented amendments to the specification and claims.

The title of the specification has been generally amended to better conform to the claimed subject matter. The heading and content of the originally filed "Brief Summary of the Invention" section beginning on page 4, line 7 have also been generally amended for the same reason.

Claims 1, 3 and 29-39 have been amended and claims 10-12, 36 and 40-51 have been cancelled without prejudice.

These amendments are believed to be proper, do not introduce new matter, and serve to place the application in proper condition for reconsideration and allowance.

### **Election/Restriction Requirement**

The Office Action sustained the restriction requirement between originally presented Group 1 claims 1-42 and Group 2 claims 43-51, and withdrew claims 42-53 from further consideration.

While the Applicant respectfully maintains a view that the restriction requirement was improper, the Applicant has elected to cancel without prejudice the withdrawn claims 43-51. All pending claims in the application continue to at least be directed to the elected invention of Group 1.

#### **Rejection of Claims Under 35 U.S.C. §112**

Claims 1-42 were rejected under 35 U.S.C. §112, second paragraph, on the basis that the claim terms “actuator/coil assembly” and “coil/bobbin assembly” were viewed as being indefinite. While the Applicant respectfully traverses the rejection, the Applicant has elected to amend the claims by removing these terms altogether from the claims. These amendments do not affect the scope of the claims, and serve to obviate the rejection.

#### **Rejection of Claims Under 35 U.S.C. §102**

Claims 1-8, 13 and 17-22 were rejected under §102(e) as being anticipated by U.S. Published Patent Application No. US2003/0081355 to Arisaka et al. (“Arisaka ‘355”). Claims 1-2, 4-12 and 29-36 were rejected under §102(e) as being anticipated by U.S. Patent No. 6,867,950 to Lin (“Lin ‘950”). Claims 29-30 were rejected under §102(b) as being anticipated by U.S. Published Patent Application No. 2001/042941 Angellotti (“Angellotti ‘941”). Claims 37-38 were rejected under §102(b) as being anticipated by U.S. Patent No. 5,734,528 to Jabbari et al. (“Jabbari ‘528”). Claims 29-30 and 37-38 were rejected under §102(b) as being anticipated by U.S. Patent No. 6,229,675 to Tanaka et al. (“Tanaka ‘675”). These rejections are respectfully traversed and will be discussed in turn.

## 1. Arisaka '355

Arisaka '355 discloses pin holes 20 in a molded bobbin 11. The pin holes 20 are formed from tooling used to support a coil 6 and/or a reinforcement plate 15 during the molding operation. Arisaka '355, FIGS. 2-3 and para [0041], lines 7-12. Arisaka '355 further discloses to fill the pin holes 20 with an adhesive after the molding operation. Arisaka '355, para [0041], lines 12-14.

Accordingly, Arisaka '355 fails to disclose “*overmolding a coil to an actuator to attach said coil to said actuator via an intervening overmold material,*” as recited by claim 1. The molded bobbin 11, which is located within the circumferential extent of the coil, cannot be reasonably viewed as attaching the coil to the actuator, as claimed.

Arisaka '355 also fails to disclose that “*the adhesive contactingly engages the coil and the actuator,*” as further recited by claim 1. Even if the reinforcement plate 15 in Arisaka '355 is characterized as forming a part of the actuator, which the Applicant respectfully traverses, the adhesive in pin holes 20 merely bonds the bobbin 11 to the plate 15, not the coil to the actuator as featured by claim 1.

Accordingly, reconsideration and withdrawal of the rejection of claim 1, and for the claims depending therefrom, as being anticipated by Arisaka '355 are respectfully requested.

## 2. Lin '950

Lin '950 generally discloses two different embodiments of actuator for a data storage device. In FIG. 1, adhesive 29 is used to secure a coil 22 to an actuator structure 16, 18, and an overmold 20 is used to secure a free end of the coil 22 to the actuator structure 16, 18. See FIG.

1, col. 1, lines 45-57. While Lin '950 indicates that voids may be formed in the overmold material as a result of a high temperature injection molded process, there is nothing that can be reasonably construed as disclosing, teaching or suggesting that the adhesive 29 would be applied to, or incidentally flow into, such voids. Col. 1, lines 63-67.

In FIG. 3, Lin '950 discloses a first layer of adhesive 310 used to attach a coil 312 to an actuator structure 304, 306, and a second layer of adhesive 311 used to attach a bobbin 302 to the coil 312. See col. 5, lines 24-27 and lines 41-45. Lin '950 further discloses to optionally apply an overmolding to the "*free end of the wound coil 312*" of FIG. 3, as desired. Col. 7, lines 13-18.

Lin '950 is accordingly deficient at least with regard to disclosing, teaching or suggesting "*disposing an adhesive in at least one adhesive receptacle defined in the overmold material so that the adhesive contactingly engages the coil and the actuator.*" It appears that the overmolding and adhesive processes in Lin '950 might be performed concurrently or sequentially, but there is nothing that explicitly or inherently indicates the adhesive would be placed "*in at least one adhesive receptacle in the overmold material.*" Accordingly, Lin '950 fails to disclose, teach or suggest the claimed subject matter of claim 1. Reconsideration and withdrawal of the rejection of claim 1, and for the claims depending therefrom, are accordingly solicited.

With regard to independent claim 29, Lin '950 is similarly deficient at least with regard to disclosing "*forming an adhesive receptacle in said [overmolding] material,*" as claimed. Lin '950 is also deficient with regard to "*subsequently filling the adhesive receptacle with an adhesive,*" as claimed.

The Applicant further notes that claim 29 recites the adhesive in the adhesive receptacle “*contactingly engages the coil and the actuator.*” The Applicant respectfully traverses the view that a void as disclosed by Lin ‘950 could be reasonably characterized as the recited “adhesive receptacle,” but even if it was, this latter language would still not be met, either expressly or inherently.

Accordingly, reconsideration of the rejection of claim 29, and for the claims depending therefrom, are respectfully requested.

### 3. Angellotti ‘941

Angellotti ‘941 generally discloses to “*interlockingly couple*” a coil 56 to a carriage body sidewall structure 82 using “*bonding methods or adhesives.*” Para [0032], lines 1-12.

Accordingly, Angellotti ‘941 is at least silent with regard to disclosing, teaching or suggesting “*forming an adhesive receptacle in said [overmolding] material,*” as claimed by claim 29. Lin ‘950 is also deficient with regard to “*subsequently filling the adhesive receptacle with an adhesive,*” as claimed by claim 29. Reconsideration and withdrawal of the rejection of claims 29-30 as being anticipated by Angellotti ‘941 are accordingly solicited.

### 4. Jabbari ‘528

Jabbari ‘528 generally discloses to orient a number of components including an actuator arm 117 with locking flanges 200, 202, a bobbin 114, a coil (wires) 116, a terminal block 123 and striker plate 136. These assembled components are then subjected to a molding operation in

which a thermoplastic resin compound is injected to form an overmold 224. See col. 4, lines 15-37; col. 6, lines 23-62 and FIGS. 2C-2D.

Jabbari '528 fails to disclose, teach or suggest "*forming an adhesive receptacle in said [overmolding] material,*" as claimed by claim 37. Jabbari '528 is also deficient with regard to "*subsequently filling the adhesive receptacle with an adhesive to further attach said bobbin to said coil,*" as claimed by claim 37. Reconsideration and withdrawal of the rejection of claims 37-38 as being anticipated by Jabbari '528 are accordingly solicited for these reasons.

#### 5. Tanaka '675

Tanaka '675 generally discloses a coil 5 with an injection molded bobbin. Tanaka '675 is thus silent with regard to disclosing, teaching or suggesting "*forming an adhesive receptacle in said [overmolding] material,*" as claimed by claims 29 and 37. Tanaka '675 is further silent with regard to "*subsequently filling the adhesive receptacle with an adhesive,*" as further claimed by claims 29 and 37. Reconsideration and withdrawal of the rejection of claims 29-30 and 37-38 as being anticipated by Tanaka '675 are accordingly solicited.

#### Rejection of Claims Under 35 U.S.C. §103(a)

A number of rejections via obviousness were presented as well by the Office Action, and these will be briefly discussed in turn. Dependent claims 13-15 were rejected as obvious over Lin '950 in view of U.S. Patent No. 6,061,206 to Foisy et al. ("Foisy '206"). This rejection is traversed on the basis that these claims depend from patentable base claim 1, as well as on the

basis that Foisy '206 teaches or suggests nothing of any particular significance to make up for the deficiencies of Lin '950 set forth above.

Dependent claim 16 was rejected as obvious over Lin '950 in view of U.S. Patent 5,623,759 to Thorson et al. ("Thorson '759"). This rejection is respectfully traversed for the same reasons.

Dependent claims 23-28 were rejected as obvious over Arisaka '355, Lin '950 and Foisy '206. These claims are believed patentable as depending from patentable base claim 1, as well as on the basis that the differences between these references, considered as a whole, and the claimed subject matter are sufficient to preclude establishment of a *prima facie* case of obviousness. MPEP 2141.

Independent claim 37, and dependent claims 38-42, were rejected as being obvious over Lin '950 in view of Thorson '759 and Foisy '206. This rejection is respectfully traversed including on the basis that, as discussed above, these respective references when considered as a whole are substantially different from the claimed combination.

While Lin '950 generally discloses to use both adhesive and overmolding to secure a coil to an actuator, Lin '950 does not contemplate provision of an adhesive receptacle in the overmolding material into which adhesive is subsequently applied, as generally featured by claim 37. Thorson '759 and Foisy '206 are similarly deficient. No amount of "common sense" would be sufficient to therefore lead the skilled artisan to arrive at the subject matter of claim 37 without the use of impermissible hindsight. See *KSR v. Teleflex*, 550 U.S. \_\_\_\_ (2007); *Graham v. John Deere Co.*, 383 U.S. 1 (1966); MPEP 2141. Accordingly, claim 37, and the claims depending therefrom, are believed to be nonobvious over these references.

**Conclusion**

This is intended to be a complete response to the first substantive Office Action mailed August 8, 2006. Reconsideration and allowance of all pending claims are respectfully requested.

Should any questions arise concerning this Response, the Examiner is cordially invited to contact the below signed attorney.

Respectfully Submitted,

By



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